Kinetico water systems

DEPEND ON DAVEY WATER PRODUCTS

Installation Instructions

Softening Systems

Block Salt Softeners
2020CHF

Standard Softeners
2025s
2060s

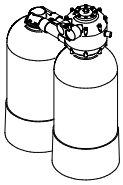
Commercial Softeners
2060s OD

- Check your local building and sanitation codes for installation compliance. Installation must meet all state and local codes.
- Check your water quality first. This system is not intended to be used for treating water that is microbiologically unsafe or of unknown quality without adequate disinfection before or after the system.

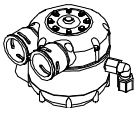
Parts Identification

Owners Manual

Installation Instructions



Softener Assembly
Includes:
control module
main and remote tanks
tank connectors
connector bracket
connector bracket pins
located inside cabinet models:
2020CHF



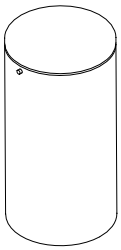
Mach Control Valve
2025s
2060s
2060s OD

Included with these systems:

Inlet / Outlet Adapters

Adapter E-clips

Inlet / Outlet O-rings

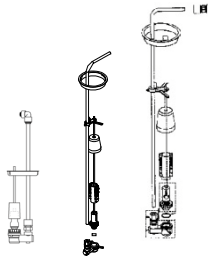


Brine Tank

Drain Line Tubing

Brine Line Tubing

Brine Valve
Cabinet, standard, commercial



Safety

Read / Review

Read all steps, guides and rules carefully before installing and using the Kinetico Softening System

Chemical Care

Close or remove PVC containers and other flammable materials to prevent fire or explosions.

Provide proper ventilation when using PVC cleaner or glue.

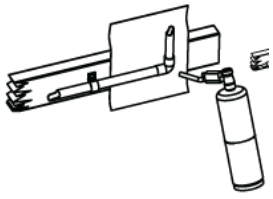
Eye Protection

Wear protective eyewear while installing to prevent potential eye injury that could be caused by splattering soldering materials or metal/plastic shavings.

Soldering

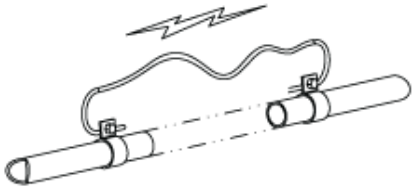
Use a scorch pad to protect any surface that may be exposed to a torch flame or excessive heat.

Use only LEAD FREE solder.



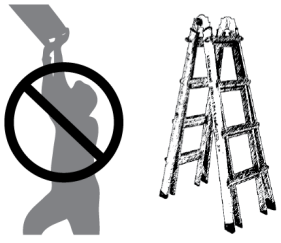
Grounding

When installing a plastic component, install grounding straps BEFORE the lines are actually cut to ensure that the ground is never broken.



Natural Reach

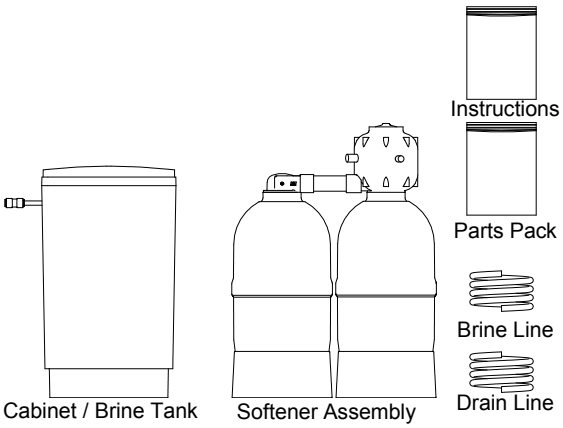
Use a ladder for all work overhead beyond your natural reach. If working continuously at a height of six feet or more, employ the appropriate safety devices.



Procedure

1 Unpack Equipment

Locate and identify parts shown in parts section.



2 Test Water Quality

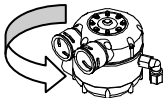
Confirm water quality to determine proper setup

Total Hardness
pH
Ferrous Iron
Ferric Iron

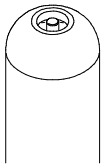
3 Assemble Softener

Larger units require tank connection.

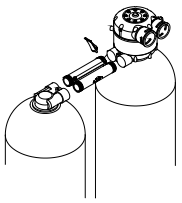
Assemble Mach Head (if applicable)



Lube O-rings

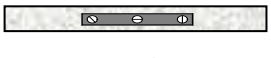


Connect tanks

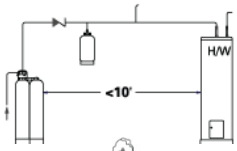


4 Position Softener

Position softener and brine tank on a level surface.



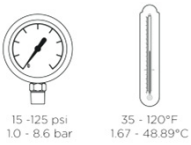
If within 3 meters of hot water tank, make sure an expansion tank is used.



Environmental conditions:
50º C Max., protect from freezing

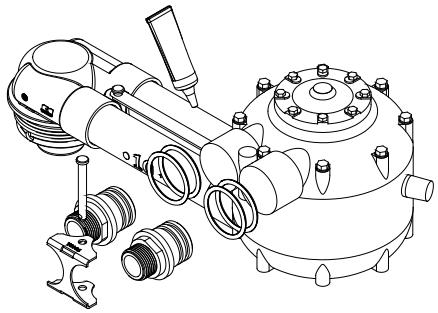
Water conditions:

Temperature	1 – 50º C
Pressure:	1 – 8.5 Bar



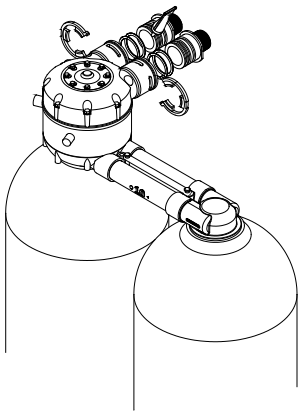
5a Connect Adapters for Classic Control Valve Systems

Lube O-rings
Insert adapters
Insert adapter bracket
Insert adapter pin



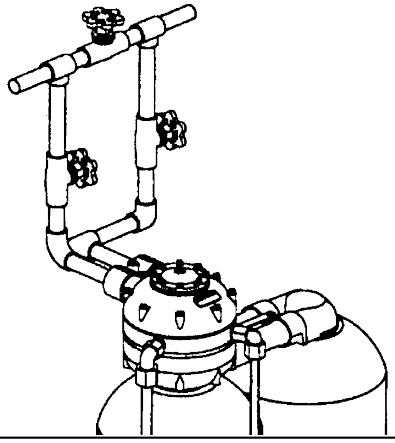
5b Connect Adapters for Mach Control Valve Systems

Install O-rings
Lube O-rings
Insert adapters
Insert E-clips



6 Install By-pass

Use of an external 3-valve by-pass or equivalent is recommended.



7 Connect Softener

Connect softener to main plumbing via by-pass.

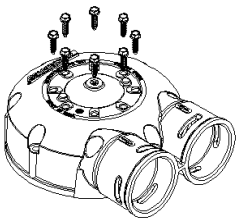
Do not solder brass adapters while they are inserted in the control module.

Take care during the installation process to assure that solder and flux do not come in contact with:

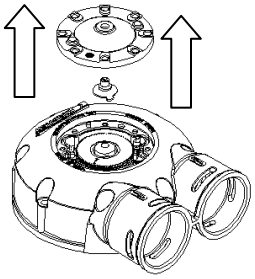
- media tanks
- control module
- E-clips
- related plastic components

8 Set Meter Disc

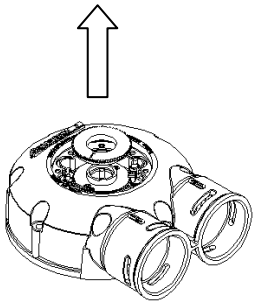
Set number of gallons between regenerations based on your system size and inlet water quality (see step 10).



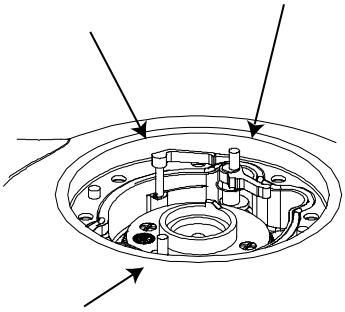
Remove cap screws



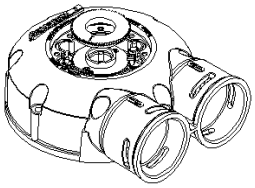
Remove cap and actuator



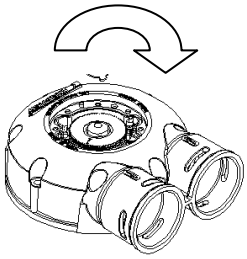
Remove existing use meter disc



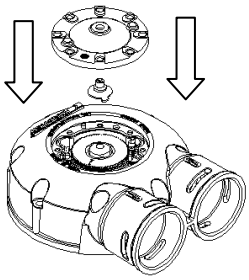
Make sure pawls and springs are back before inserting new meter disc



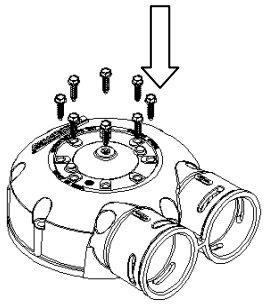
Insert new meter disc



Gently turn disc clockwise until pawls fall in place



Replace oring, spring, actuator and cap



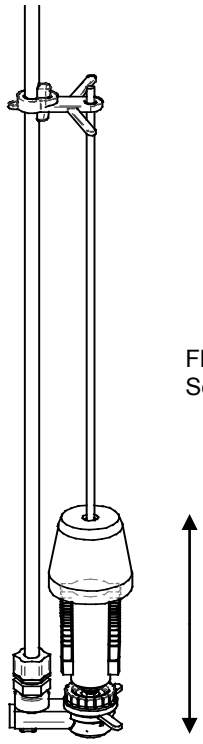
Tighten cap screws

9 Set Brine Valve

Float Cup Setting (all units)
Remove the brine valve assembly and rest it on a flat surface.

Remove rubber band.

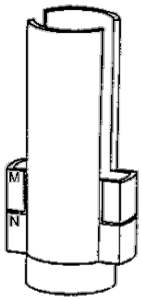
Height is measured from the base of the brine valve assembly to the top of the float cup (see drawing at right).



Adjuster Tube Setting (standard and commercial units)

Cut and remove tabs on both sides of the tube.

Remaining number or letter imprinted on the tab determines the correct setting. The drawing at right shows an adjuster tube at setting "M".



Adjuster Tube (setting = M)

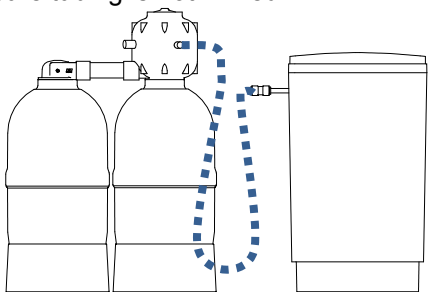
10 Meter Disc and Brine Valve Chart

Select disc based on inlet compensated hardness.

				Meter Disc Number Denotes Compensated Hardness in mg/L							
Model	**Salt Setting**	**(adjuster)**	**Float**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
2020c HF	0.22 Kg	--	--	34	68	86	120	154	188	222	257
	0.34 Kg	--	114mm	34	86	120	171	222	257	308	342
2025s	0.45 Kg	1.5	184mm	68	137	205					
	0.6 Kg	1.5	191mm	86	188	274	359	428			
2060s	1.22 Kg	N	153mm	137	257	376	479	581	684	770	855
	1.63 Kg	L	185mm	154	308	462	581	701	821	923	1026
	1.81 Kg	N	172mm	171	325	479	616	752	872	975	1077
	2.00 Kg	N	178mm	188	342	496	650	787	906	1026	1129
2060s OD	1.22 Kg	N	152mm	51	103	154	188	239	291	325	376
	1.81 Kg	N	172mm	68	120	188	257	308	359	428	479
	2.00 Kg	N	178mm	68	137	205	274	325	393	445	513

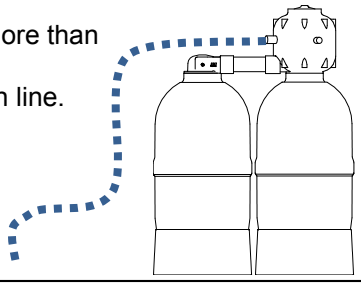
11 Connect Brine Tank

Apply 2 – 3 wraps of Teflon® tape to nipple on control valve.
Locate tube elbow.
Hand tighten elbow, then turn once with wrench.
Attach tube from elbow to brine valve – hand tighten tube side nuts.
Make sure tubing is not kinked.



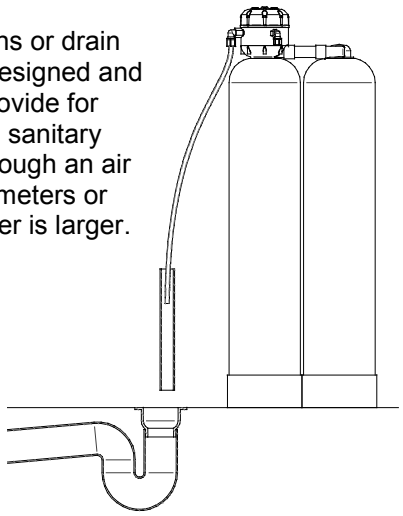
12 Install Drain Line

Apply 2 – 3 wraps of Teflon® tape to ½" nipple on control valve.
Locate ½" x tube elbow.
Hand tighten elbow, then turn once with wrench.
Attach drain line from elbow to drain.
Make sure line is not kinked.
Drain lines must not travel more than 2.4 meters up from module head.
On lines traveling more than 10 meters, increase diameter of the drain line.



13 Confirm Drain Air Gap

Waste connections or drain outlets shall be designed and constructed to provide for connection to the sanitary waste system through an air gap of 2 pipe diameters or 25 mm, whichever is larger.

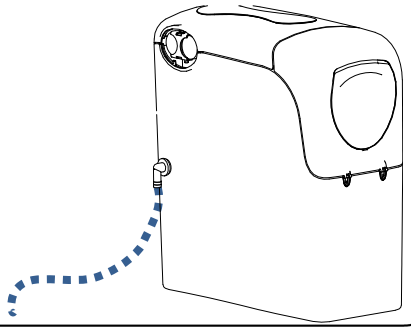


14 Install Brine Tank Overflow

Install drain line on the barbed overflow fitting on the drum and connect it to a drain.

Make sure the drain is not higher than the barbed fitting.

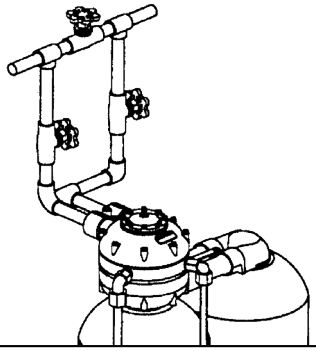
FOLLOW PLUMBING CODES.



15 Flush System

Flush both the inlet and outlet lines by opening the by-pass valve and allowing water to rinse out any debris in the lines.

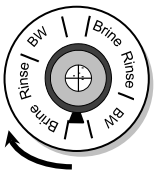
Flush lines for 10 minutes.



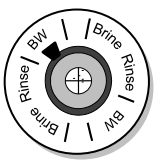
16 Start-Up System

Put by-pass into service position.

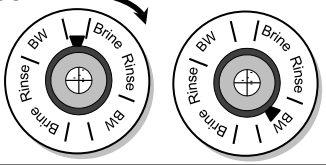
Using #2 Philips screwdriver, depress and turn actuator clockwise into backwash position.



Brine tank will begin to fill.



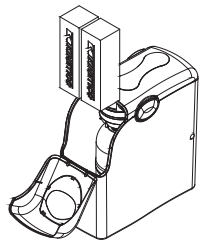
After 5 minutes, turn actuator until alternate tank is in backwash.

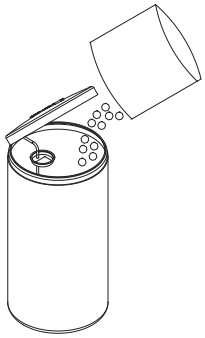


17 Add Salt

Add a clean grade of salt at this time.

DO NOT USE ROCK SALT OR SOLAR SALT.





18 Purge Air from Plumbing

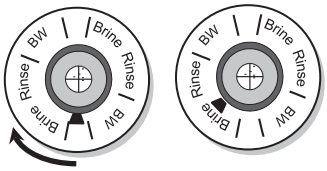
After the unit is fully pressurized, open a faucet in the house to purge air from lines.

Check all other house faucets, and purge air by manually cycling unit from one tank to the other.

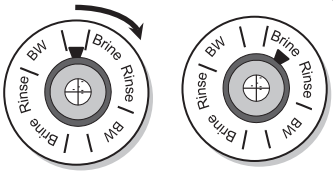
19 Sanitize Softener

Regenerate both tanks.

Using #2 Philips screwdriver, turn actuator clockwise into brine position.



After regeneration time, initiate regeneration on second tank.



Use a clean grade of salt appropriate for use with water treatment equipment. DO NOT USE ROCK SALT OR SOLAR SALT.

Mix 29.6 mL of unscented household bleach in 15.1 liters of clean/soft water. This should make a 100 ppm solution. Use 22.7 liters for commercial units.

Put the system into by-pass.

Disconnect the brine line and put the 3/8” tube into the container holding the bleach mixture from the step above.

Note: *Do not add bleach to brine tank. Salts containing red-out additives will create hazardous fumes.*

Put the system into service.

Put the unit into brine draw on one tank.

Draw the mixture until a strong bleach odor is detected (smelled or tested) in the drain line. This procedure should produce approximately 20 ppm in the mixed solution.

Switch quickly to the other tank and repeat the procedure.

Advance the control disc to the service position and allow the unit to stand for 30-60 minutes. The colder the water, the longer the stand time should be.

Put unit into by-pass.

Reconnect the brine line (3/8” tube) to the brine tank and backwash each tank of the softener two times.

Put unit into service.

Davey® Repair or Replacement Guarantee

In the unlikely event in Australia or New Zealand that this Davey product develops any malfunction within two year of the date of original purchase due to faulty materials or manufacture, Davey will at our option repair or replace it for you free of charge, subject to the conditions below.

Should you experience any difficulties with your Davey product, we suggest in the first instance that you contact the Davey Dealer from which you purchased the Davey product. Alternatively you can phone our Customer Service line on 1300 367 866 in Australia, or 0800 654 333 in New Zealand, or send a written letter to Davey at the address listed below. On receipt of your claim, Davey will seek to resolve your difficulties or, if the product is faulty or defective, advise you on how to have your Davey product repaired, obtain a replacement or a refund.

Your Davey Two Year Guarantee naturally does not cover normal wear or tear, replacement of product consumables (i.e. mechanical seals, bearings or capacitors), loss or damage resulting from misuse or negligent handling, improper use for which the product was not designed or advertised, failure to properly follow the provided installation and operating instructions, failure to carry out maintenance, corrosive or abrasive water or other liquid, lightning or high voltage spikes, or unauthorized persons attempting repairs. Where applicable, your Davey product must only be connected to the voltage shown on the nameplate.

Your Davey Two Year Guarantee does not cover freight or any other costs incurred in making a claim. Please retain your receipt as proof of purchase; you **MUST** provide evidence of the date of original purchase when claiming under the Davey Two Year Guarantee.

Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Davey products. This limitation does not apply to any liability of Davey for failure to comply with a consumer guarantee applicable to your Davey product under the Australian or New Zealand legislation and does not affect any rights or remedies that may be available to you under the Australian or New Zealand Consumer Legislation.

In Australia, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Should your Davey product require repair or service after the guarantee period; contact your nearest Davey Dealer or phone the Davey Customer Service Centre on the number listed below.

For a complete list of Davey Dealers visit our website (davey.com.au) or call:

DEPEND ON DAVEY
WATER PRODUCTS

AUSTRALIA

Customer Service Centre
6 Lakeview Drive,
Scoresby, Australia 3179
Ph: 1300 367 866
Fax: 1300 369 119
Website: davey.com.au

NEW ZEALAND

Customer Service Centre
7 Rockridge Avenue,
Penrose, Auckland 1061
Ph: 0800 654 333
Fax: 09 527 7654
Website: daveynz.co.nz

Davey Water Products Pty Ltd
Member of the GUD Group
ABN 18 066 327 517

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P/N 14197-2 supersedes P/N 14197-1

*** Installation and operating instructions are included with the product when purchased new. They may also be found on our website.**